



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,800	07/14/2003	Dean Mills	881-011406-US(PAR)	5786
2512	7590	12/26/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			RUTTEN, JAMES D	
			ART UNIT	PAPER NUMBER
			2192	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/26/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/618,800	MILLS ET AL.	
	Examiner	Art Unit	
	J. Derek Ruttan	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 July 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 14 July 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 10/20/03.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. Claims 1-10 have been examined.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the security setting, access levels, security model, and full/limited access (all elements of claim 5) must be shown or the features canceled from claim 5. No new matter should be entered.

4. The drawings are objected to because Figures 3a-6b do not appear to be in compliance with several requirements of 37 CFR 1.84. They contain text that is smaller than 1/8", and appear to be computer screenshots of a color image that have been printed as black and white but are not of sufficient quality or shading such that all details in the drawings are reproducible in black and white in the printed patent.

5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no disclosure of security, access levels, security models, or full/limited access (all elements of claim 5). Also, there is no disclosure of a "storage medium" (claim 10). No new matter should be entered.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claim 10 is rejected under 35 U.S.C. 101 because it is directed to a "storage medium". The originally filed specification does not provide a discussion of a "storage medium." The lack of a descriptions of a "medium" does not limit the medium to a tangible embodiment, and could

be interpreted to include such non-tangible media as wireless transmission media, or an electro-magnetic signal. Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14.

Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

First, a claimed signal is clearly not a "process" under § 101 because it is not a series of steps. A claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine. A claimed signal is not matter, but a form of energy, and therefore is not a composition of matter. A product is a tangible physical article or object, some form of matter, which a signal is not. In contrast, a tangibly claimed computer-readable medium (e.g. magnetic or optical disk) encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. For further information, see Official Gazette, Nov. 22, 2005, 1300 OG 142, "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", which can be found online at
<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. A review of the specification does not reveal any disclosure of access levels, security models, leveraging existing models, or providing full or limited access. One skilled in the art would not be enabled to make and/or use the invention. Interpretation will be attempted based on the bare language of the claim.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 5 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Lines 2 and 3 of claim 5 recite the clause “provide full access to *some*, while limiting access to *others*.” The words “some” and “others” are used as an adjective but do not have a target to modify. It is not clear to what the words are referring. For further examination, this will be interpreted as referring to a “user”.

14. Claim 8 recites, “The method according to claim 6.” However, claim 6 is directed to a system. This appears to be a typo, and claim 8 is instead interpreted as --The method according to claim 7--.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1, 2 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Application Publication No. US 2002/0073094 A1 by Becker et al. (hereinafter "Becker").

In regard to claim 1, Becker discloses:

A modular system for programming machine automation controls (See Figures 1 and 2), comprising:

a library of minor step modules; See Fig. 2 element "B", also paragraph [0024], e.g. "models V1, V3 of a library B."

a procedure creator for creating a machine automation procedure from an assembly of said minor step modules; See paragraph [0024], e.g. "function CC"

a product type manager for inputting product parameters independent of said minor step modules; See paragraphs [0021] and [0026], e.g. "parameterizing module."

Note that the parameterizing module affects the compound, not the modules in the library.

a system configuration manager for defining machine configuration independent of said minor step modules; and See Fig. 1, element F3, and paragraphs [0020] and

[0026], e.g. "Interconnection module F3." The interconnection module defines configuration by connection with other objects.

an execution engine for calling said procedure and maintaining information flow in and out of said minor step modules. See Fig. 1, element F5, and paragraph [0022], e.g. "Automation object management F5." Note that automation objects (i.e. procedures) would be unable to be inserted if they could not be called.

In regard to claim 2, the above rejection of claim 1 is incorporated. Becker further discloses: *wherein procedures can further include major step modules assembled from a plurality of said minor step modules to perform a larger machine function.* See paragraph [0023].

In regard to claim 7, Becker discloses:

A modular method for programming machine automation controls. See paragraphs [0025] and [0026]. All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 8, the above rejection of claim 7 is incorporated. All further limitations have been addressed in the above rejection of claim 2.

In regard to claim 9, all limitations have been addressed in the above rejection of claim 1. Note that the system of claim 1 is broadly interpreted as being implemented

using software "modules." If these components were not modules, then they could not be described as functioning separately.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker as applied to claim 2 above, and further in view of US Patent No. 6,061,602 to Meyer (hereinafter "Meyer").

In regard to claim 3, the above rejection of claim 2 is incorporated. Becker further discloses: *wherein procedures are created from one or more components selected from the group consisting of major step, minor step*, See above rejection of claims 1 and 2. Becker does not expressly disclose *repeat, and if statement*. However, Meyer teaches programming with repeat and if constructs. See Fig. 5, depicting a control loop (i.e. repeat) and conditional statements (i.e. "if statements"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Meyer's teaching of programming with Becker's components since these provide fundamental programming concepts without requiring standard software programming code (see Meyer column 2 lines 15-20).

In regard to claim 4, the above rejection of claim 1 is incorporated. Becker further discloses: *output display*. See paragraph [0031], e.g. “visual programming.” Becker does not expressly disclose *an information center to provide a common screen*. However, Meyer teaches collecting icons in a display providing a common screen. See column 3 line 63 – column 4 line 7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Meyer’s teaching of information displays with Becker’s visual programming in order to interactively develop automation applications (see Meyer column 4 lines 3-7).

19. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Becker as applied to claim 1 above, and further in view of US Patent Application Publication No. US 2002/0035403 A1 by Clark et al. (hereinafter “Clark”).

In regard to claim 5, the above rejection of claim 1 is incorporated. Becker does not expressly disclose: *wherein security can be set to a plurality of access levels by leveraging an existing security model to provide full access to some [users], while limiting access to other [users]*. However, Clark teaches that a security model is leveraged to set security to an access level in order to regulate access. See paragraph [0046], e.g. “authenticate for root level access.” It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Clark’s teaching of

security with Becker's system in order to restrict operation to authenticated users (see Clark paragraph [0046]).

20. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker as applied to claim 1 above, and further in view of US Patent No. 6,161,217 to Detlefs et al. (hereinafter "Detlefs").

In regard to claim 6, the above rejection of claim 1 is incorporated. Becker does not expressly disclose: *wherein one or more minor step modules are directly embedded within the execution engine for improved performance*. However, Detlefs teaches that modules can be "inlined" (i.e. embedded) into procedures to improve performance. See column 2 lines 53-62. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Detlefs' teaching of inlining with Becker's modules in order to improve performance (see Detlefs column 2 lines 53-62).

In regard to claim 10, Becker does not expressly disclose: *A storage medium readable by a computer encoding a computer process*. All further limitations have been addressed in the above rejection of claim 1. However, Detlefs teaches that a storage medium is used to encode a computer process. See column 1 lines 32-36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Detlefs' storage medium with Becker's system in order to configure a computer to implement the system (see Detlefs column 1 lines 35-36).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on T-F 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jdr



TUAN DAM
SUPERVISORY PATENT EXAMINER